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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/705,493
				Filing Date	November 10, 2003
				First Named Inventor	Eric Hamilton et al.
				Group Art Unit	2471 2465
				Examiner Name	Not yet assigned THUY PARDO
Sheet	1	of	5	Attorney Docket Number	112056-0120

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
TP		5,963,962		HITZ, et al.	10-05-1999	
		6,038,570		HITZ, et al.	03-14-2000	
		5,819,292		HITZ, et al.	10-06-1998	
		6,643,654		PATEL, et al.	11-04-2003	
				PAWLOWSKI, et al.		U.S. Patent Application Serial No. 10/215,917, (Attn. Matter No. 112056- 0070) filed August 9, 2002, titled MULTI-PROTOCOL STORAGE APPLIANCE THAT PROVIDES INTEGRATED SUPPORT FOR FILE AND BLOCK ACCESS PROTOCOLS
				EDWARDS, et al.		U.S. Patent Application Serial No. 10/027,634, (Attn. Matter No. 112056- 0002) filed December 21, 2001, titled FILE SYSTEM DEFRAGMENTATION TECHNIQUE VIA WRITE ALLOCATION
				HAMILTON, et al.		U.S. Patent Application Serial No. 10/705,025, (Attn. Matter No. 112056- 0121) filed November 10, 2003, titled SYSTEM AND METHOD FOR MANAGING FILE METADATA DURING CONSISTENCY POINTS
				FAIR, et al.		U.S. Patent Application Serial No. 10/705,470, (Attn. Matter No. 112056- 0123) titled METHOD FOR DETECTING LEAKED BUFFER WRITES ACROSS FILE SYSTEM CONSISTENCY POINTS
TP		5,511,177		KAGIMASA, et al.	04-23-1996	

FOREIGN PATENT DOCUMENTS								
Examine r Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

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² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

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First Named Inventor	Eric Hamilton et al.
Group Art Unit	2171 2165
Examiner Name	Not yet assigned THUY PARD
Attorney Docket Number	112056-0120

Sheet 2 of 5

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JP		5,897,661		BARANOVSKY, et al.	04-27-1999	
		6,185,655	B1	PEPING	02-06-2001	
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Application Number

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Filing Date

November 10, 2003

First Named Inventor

Eric Hamilton et al.

Group Art Unit

~~2171~~ 2165

Examiner Name

~~Not yet assigned~~

Attorney Docket Number

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Sheet

3

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5

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 5

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Filing Date	November 10, 2003
First Named Inventor	Eric Hamilton et al.
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Examiner Name	Not yet assigned THUY PARDO
Attorney Docket Number	112056-0120

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TP		DAVID HITZ et al., TR3002 File System Design for a NFS File Server Appliance published by Network Appliance, Inc.	
↑		Common Internet File System (CIFS) Version: CIFS-Spec 0.9, Storage Networking Industry Association (SNIA), Draft SNIA CIFS Documentation Work Group Work-in-Progress, Revision Date: 3/26/2001	
		FIELDING et al., (1999) Request for Comments (RFC) 2616, HTTP/1.1	
		Auspex Systems, LFS - A Local File System for Multiprocessor NFS Network Servers, 1994	
		Unix Workstation System Administration Education Certification Course, January 8, 2002	
		RON LENIVE and MICHELLE GERVAIS, Building a SAN, SunExpert Magazine, March 1999, pp50-64	
		Network Appliance ends NAS-SAN war by COMPUTERWIRE, http://www.theregister.co.uk/2002/10/102/network_appliance_ends_nassan_war/print.html , Published Wednesday, October 2, 2002	
		International Search Report PCT/US03/23597, 03-09-2004, 7 pages, International Searching Authority, Alexandria, Virginia, USA	
		International Search Report PCT/US03/23597, 04-14-2004, 8 pages, International Searching Authority, Alexandria, Virginia, USA	
		LU, Y. "Performance Study of iSCSI-Based Storage Subsystems", IEEE Communications Magazine, pp. 76-82, August 2003	
TP		Celerra File Server Architecture for High Availability, EMC2 where information lives, August 1999, pp. 1-7.	

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		Filing Date	November 10, 2003
		First Named Inventor	Eric Hamilton et al.
		Group Art Unit	2171 2165
		Examiner Name	Not yet assigned THUY PARDO
Sheet 5 of 5	Attorney Docket Number	112056-0120	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TP		CALLAGHAN B. "NFS Version 3 Protocol Specification", Request for Comments (RFC) 1813 June 1995	
		Asante Desktop EN/SC Adapters User's Manual April 1996	
		Asante EN/SC Adapter Family Installation Guide May 1994	
		Maintenance Procedures ND (8C) nd-network disk control February 1985	
		Misc. Reference Manual Pages ND (4P) nd-network disk driver 26 July 1985	
TP		Performance Without Compromise: The Virtual Storage Architecture 1997	

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		Number	Kind Code ² (if known)			
R	1	Re. 34,100		Hartness	10-13-1992	
	2	4,156,907		Rawlings, et al.	05-29-1979	
	3	4,399,503		Hawley	08-16-1983	
	4	4,598,357		Swenson et al.	07-01-1986	
	5	4,688,221		Nakamura et al.	08-18-1987	
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	8	4,805,090		Coogan	02-14-1989	
	9	4,837,675		Bean et al.	06-06-1989	
	10	4,864,497		Lowry et al.	09-05-1989	
V	11	4,896,259		Jacobs et al.	01-23-1990	
	12	4,899,342		Potter et al.	02-06-1990	
	13	4,989,206		Dunphy, Jr. et al.	01-29-1991	
	14	5,124,987		Milligan et al.	06-23-1992	
	15	5,155,835		Belsan	10-13-1992	
	16	5,426,747		Weinreb et al.	06-20-1995	
	17	5,581,724		Belsan et al.	12-03-1996	
	18	6,636,879	B1	Doucette et al.	10-21-2003	
TK						

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TJ	20	Administration Guide found at http://www.openafs.org/pages/doc/AdminGuide/auagd010.htm , visited on 3/2/2005	
TJ	21	BASILICO, ET AL., <i>Error Correction System Using "Shadow Memory,"</i> IBM Technical Disclosure Bulletin, May 1984, pp. 5792-5793	
	22	BITTON, DINA, <i>Disk Shadowing</i> , Proceedings of the 14 th VLDB Conference, LA, CA (1988)	
	23	BLASGEN, M.W. ET AL., <i>System R: An architectural Overview</i> , Reprinted from IBM Systems Journal Vol. 20, no. 1, 1981/1981, 1999	
	24	BORENSTEIN, NATHANIEL S., <i>CMU's Andrew project a retrospective</i> , Communications of ACM, (39)12, December 1996	
	25	BROWN, MARK R. ET AL., <i>The Alpine file system</i> , ACM Transactions on Computing Systems, 3(4):261–293, November 1985	
	26	CHEN, PETER M., ET AL., <i>An Evaluation of Redundant Arrays of Disks Using an Amdahl 5890</i> Performance Evaluation, pp. 74-85, 1990	
	27	CHUTANI, SAILESH, ET AL., <i>The Episode file system</i> , In Proceedings of the USENIX Winter 1992	
	28	CLARK, B.E., ET AL., <i>Application System /400 Performance Characteristics</i> , IBM Systems Journal, 28(3): 407-423, 1989	
	29	Data Sheet for the Check Point Software Technologies product Flood-Gate-1 (1997)	
	30	DIBBLE, PETER C., ET AL., <i>Beyond Striping: The Bridge Multiprocessor File System</i> , Computer Science Department, University of Rochester, Aug. 11, 1989	
	31	DOUGLIS, FRED, ET AL., <i>A comparison of two distributed systems: Amoeba and Sprite</i> - Computing Systems, 4(4), Fall 1991, pp. 353-385 ?(copy of article I have has no date or cite)	
	32	GAIT, JASON, <i>Phoenix: A Safe In-Memory File System</i> . Communications of the ACM, 33(1):81–86, January 1990	
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TJ	34	HITZ, DAVE ET AL., <i>File System Design for an NFS File Server Appliance</i> , Technical Report 3002, Rev. C395, presented Jan. 19, 1994	
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TP	35	HOWARD, JOHN H, ET AL. <i>Scale and Performance in a Distributed File System</i> , Carnegie Mellon University, CMU-ITC-87-068, Aug. 5, 1987	
	36	HOWARD, JOHN, H. ET AL., <i>Scale and performance in a distributed file system</i> , ACM Trans. Computer. System., 6(1), Feb. 1988 pp. 51-81	
	37	HOWARD, JOHN H., <i>An Overview of the Andrew File System</i> , Carnegie Mellon University, CMU-ITC-88-062	
	38	<i>The IBM System/38</i> , Chapter 8, pp. 137-15	
	39	ISOMAKI, MARKUS, <i>Differentiated Service for the Internet</i> , Department of Technical Physics and Mathematics, May 9, 1998	
	40	KAZAR, MICHAEL L., ET AL., <i>Decorum File System Architectural Overview</i> , USENIX Summer Conference, Anaheim, California, 1990	
	41	LOMET, DAVID., ET AL., <i>The performance of a multiversion access method</i> , ACM SIGMOD International Conference on Management of Data, 19:353-363	
	42	LORIE, RAYMOND, A. <i>Physical integrity in a large segmented database</i> , ACM Trans. Database Systems, (2)1: 91-104, March 1977	
	43	LORIE, RA, <i>Shadow Page Mechanism</i> , IBM Technical Disclosure Bulletin, June 1986, pp. 340-342	
	44	MCKUSICK, MARSHALL KIRK, ET AL., <i>A Fast File System for UNIX</i> , Computer Science Division, Department of Electrical Engineering and Computer Sciences, Univ. of CA, Berkley, Feb. 18, 1994	
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46	MOONS, HERMAN ET AL., <i>Location-Independent Object Invocation in Open Distributed Systems</i> , Autumn 1991 EurOpen Technical Conference and Exhibition, pp. 287-300 (September 16-20, 1991)		
47	MORRIS, JAMES H., Et Al, <i>Andrew: A Distributed Personal Computing Environment</i> , Comm. of the ACM, vol. 29, March 1986, pp 184-201		
48	MULLENDER, SAPE J., ET AL., <i>A distributed file service based on optimistic concurrency control</i> , ACM Symposium on Operating System Principles (Orcas Island, Washington). Published as Operating Systems Review, 19(5):51-62, December 1985		
TP	49	MULLER, KEITH, ET AL., <i>A High Performance Multi-Structured File System Design</i> , In Proceedings of the 13th ACM Symposium on Operating Systems Principles, October 1991, pp. 56-67	

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Substitute for form 1449A/PTO <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;">(use as many sheets as necessary)</p>		Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/705,493</td> </tr> <tr> <td>Filing Date</td> <td>November 10, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Eric Hamilton et al.</td> </tr> <tr> <td>Group Art Unit</td> <td>2471 2461</td> </tr> <tr> <td>Examiner Name</td> <td>Not yet assigned- PARDO</td> </tr> <tr> <td>Attorney Docket Number</td> <td>112056-0120</td> </tr> </table>		Application Number	10/705,493	Filing Date	November 10, 2003	First Named Inventor	Eric Hamilton et al.	Group Art Unit	2471 2461	Examiner Name	Not yet assigned- PARDO	Attorney Docket Number	112056-0120
Application Number	10/705,493														
Filing Date	November 10, 2003														
First Named Inventor	Eric Hamilton et al.														
Group Art Unit	2471 2461														
Examiner Name	Not yet assigned- PARDO														
Attorney Docket Number	112056-0120														
Sheet	4	of	5												

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TP ↑	46	MOONS, HERMAN ET AL., <i>Location-Independent Object Invocation in Open Distributed Systems</i> , Autumn 1991 EurOpen Technical Conference and Exhibition, pp. 287-300 (September 16-20, 1991)	
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	53	OUSTERHOUT, JOHN, <i>A Brief Retrospective On The Sprite Network Operating System</i> , found at http://www.cs.berkeley.edu/projects/sprite/retrospective.html , visited on 3/11/2005	
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	55	PATTERSON, D., ET AL., <i>A Case for Redundant Arrays of Inexpensive Disks (RAID)</i> , SIGMOD International Conference on Management of Data, Chicago, IL, USA, 1-3 June 1988, SIGMOD RECORD (17)3:109-16 (Sept. 1988)	
	56	PETERSON, ZACHARY NATHANIEL JOSEPH, <i>Data Placement for Copy-on-Write Using Virtual Contiguity</i> , University of CA, Santa Cruz, Master of Science in Computer Science Thesis, September 2002	
	57	QUINLAN, SEAN, <i>A Cached WORM File System</i> , Software-Practice and Experience, 21(12):1289-1299 (1991)	
	58	Redundant Array of Independent Disks, from Wikipedia, the free encyclopedia, found at http://en.wikipedia.org/wiki/RAID , visited on 3/9/2005	
↓	59	ROSENBERG, J., ET AL., <i>Stability in a Persistent Store Based on a Large Virtual Memory</i> , In Security and Persistence, Rosenber, J. & Keedy, J.L. (ed), Springer-Verlag (1990) pp 229-245	
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Examiner Signature <i>[Signature]</i>		Date Considered 4/14/06	

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		Application Number	10/705,493
		Filing Date	November 10, 2003
		First Named Inventor	Eric Hamilton et al.
		Group Art Unit	2171 9165
		Examiner Name	Not yet assigned PARDO
Sheet	5	of	5
		Attorney Docket Number	112056-0120

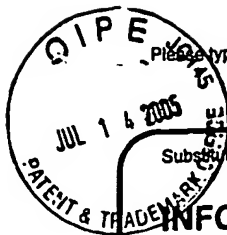
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JP	61	ROSENBLUM, MENDEL, ET AL., <i>The Design and Implementation of a Log-Structured File System</i> July 24, 1991 pp1-15.	
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**INFORMATION DISCLOSURE
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Sheet 1 of 3

Complete if Known

Application Number	10/705,493
Filing Date	November 10, 2003
First Named Inventor	Eric Hamilton et al.
Group Art Unit	2171 2165
Examiner Name	Not yet assigned THUY PARDO
Attorney Docket Number	112056-0120

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
TP	1	4,570,217		Allen et al.	02-11-1986	
	2	5,163,131		Row et al.	11-10-1992	
	3	5,202,979		Hillis et al.	04-13-1993	
	4	5,278,979		Foster et al.	01-11-1994	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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First Named Inventor	Eric Hamilton et al.
Group Art Unit	2471 2165
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TP	14	HOWARD, JOHN H., <i>An Overview of the Andrew File System</i> , Carnegie Mellon University, CMU-ITC-88-062 1988.	
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	22	OUSTERHOUT, JOHN ET AL., <i>Beating the I/O Bottleneck: A Case for Log-Structured File Systems</i> , Technical Report, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley, October 30, 1988.	
	23	PATTERSON, D., ET AL., <i>A Case for Redundant Arrays of Inexpensive Disks (RAID)</i> , Technical Report, CSD-87-391, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley 1987.	
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Sheet 3 of 3

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Filing Date	November 10, 2003
First Named Inventor	Eric Hamilton et al.
Group Art Unit	2171-2165
Examiner Name	Not yet assigned PARDO
Attorney Docket Number	112056-0120

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TP	26	QUINLAN, SEAN, <i>A Cached WORM File System</i> , Software-Practice and Experience, 21(12):1289-1299 1991.	
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	28	ROSENBLUM, MENDEL, ET AL. <i>The Design and Implementation of a Log-Structured File System</i> July 24, 1991 pp1-15.	
	29	ROSENBLUM, MENDEL, <i>The Design and Implementation of a Log-Structured File System</i> , 1992 pp. 1-93.	
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	32	SELTZER, MARGO I., ET AL., <i>Journaling Versus Soft Updates: Asynchronous Meta-Data Protection in File Systems</i> , Proceedings of 200 USENIX Annual Technical Conference, 6/18-23/2000.	
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	34	SIDEBOTHAM, BOB, <i>Volumes: The Andrew File System Data Structuring Primitive</i> , EEUG Conference Proceedings, Manchester, UK, Autumn 1986.	
	35	SUBRAMANIAN, MURALIDHAR, ET AL., <i>Performance Challenges in Object-Relational DBMSs</i> , Data Engineering Journal 22, 2 1999 pp 28-32.	
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V	37	WEST, MICHAEL, ET AL. <i>The ITC Distributed File System: Prototype and Experience</i> , Carnegie-Mellon University, Technical Report CMU-ITC-040, March 1985.	
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